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EXAMINER				
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ART UNIT		PAPER NUMBER		
2456				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/786,450

Applicant(s)

ZAKHAROFF, MICHAEL JACK

Examiner

RICHARD G. KEEHN

Art Unit

2456

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/10/2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13, 15-20, 22-27, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13, 15-20, 22-27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. **Claims 1-4, 6-13, 15-20, 22-27, 29 and 30 have been examined and are pending.**
2. **Claims 5, 14, 21 and 28 are cancelled.**

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/10/2011 has been entered.

Response to Arguments

4. Applicant's arguments, see page 12, filed 1/10/2011, with respect to the objection to the drawings have been fully considered and are persuasive. **The objection to the drawings has been withdrawn.**
5. Examiner finds support for the claim amendments in Applicant's specification ¶¶ [0006, 0012 and 0013] and cancelled claims 5, 14, 21 and 28.
6. The claim status indicator for Claim 17 was incorrect. However, rather than prolonging prosecution by issuing a non-compliance notice, Examiner reasonably infers

Applicant meant "Currently Amended" based on the statement on page 2 preceding the claim listing.

7. Applicant's arguments with respect to claims 1-4, 6-13, 15-20, 22-27, 29 and 30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1, 2, 4, 6, 8-11, 13, 15, 17, 18, 20, 22, 24, 25, 27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,282,565 B1 (Shaw et al.), and further in view of US 2004/0236966 A1 (D'Souza et al.), US 5,144,293 (Rouse) and US 7,085,812 B1 (Sherwood).

As to Claims 1, 10, 17 and 24, Shaw et al. disclose a communications system, delivery server, electronic mail communications method and non-transitory computer-readable medium having computer-executable instructions for performing steps, hereafter referred to as the "system", comprising:

at least one destination server for hosting a plurality of electronic mail (email) message boxes (Shaw et al. – Figure 1, Item 110 discloses the Incoming Email Server);

a plurality of communications devices for generating email messages each associated with a respective message box (Shaw et al. – Figure 1, items 171, 173, 175,

161, 162 and 16n disclose communications devices generating email messages with user mailboxes); and

a delivery server comprising a plurality of queues and a controller for (Shaw et al. – Figure 1, items 100, 140, 151, 153 and 155 disclose the Enterprise Email System, Email Queuing and Mailbox System comprising mail queues);

moving email messages stored in said first queue to a second queue based upon receipt of a delivery failure message (Shaw et al.—Column 11, lines 40-46 disclose the email message being rerouted based on delivery timeout failure. A timeout failure indication is a message that is received by the logic using the timeout information. The claim does not specify the origin of the message), and

the email messages generated by said communications devices (Shaw et al. – Column 1, lines 36-39 disclose email messages being generated by users); and

with a successfully delivered email message (Shaw et al.—Column 11, lines 40-46 disclose the email message being rerouted based on status of delivery timeout failure. Figure 4 element 414 discloses the detection of successful email message delivery).

Shaw et al. disclose the email delivery server with queues, but do not explicitly disclose storing in a first queue, and attempting to send to said at least one destination server at a first sending rate; and attempting to send stored in said second queue to said at least one destination server at a second sending rate that is less than the first sending rate; and moving to said first queue; the second queue being one of a plurality of queues arranged in a hierarchy, each queue in the plurality of queues having a

storage interval that successively increases from a highest queue to a lowest queue; and moving email messages from a higher queue to a next lower queue after being stored in said higher queue for a duration of its storage interval. However, D'Souza et al. disclose

storing in a first queue, and attempting to send to said at least one destination server at a first sending rate (D'Souza et al. – Page 2, ¶ [0028] disclose the decision engine storing packets in a faster send rate queue if the source address is found or a slower send rate queue if the source address is not found. ¶ [0029] discloses that there can be multiple levels of queues with gradually slower send rates. Figure 3 discloses sending at multiple rates depending on which queue the packet is placed into),

attempting to send stored in said second queue to said at least one destination server at a second sending rate that is less than the first sending rate (D'Souza et al. – Page 2, ¶ [0028] disclose the decision engine storing packets in a faster send rate queue if the source address is found or a slower send rate queue if the source address is not found.), and

moving to said first queue (D'Souza et al. - Page 2, ¶ [0030] discloses the common characteristic of status of whether the source address is known; D'Souza et al. – Page 2, ¶ [0028] disclose the decision engine storing packets in a faster send rate queue if the source address is found or a slower send rate queue if the source address is not found. ¶ [0029] discloses that there can be multiple levels of queues with gradually slower send rates. Figure 3 discloses sending at multiple rates depending on which queue the packet is placed into)

the second queue being one of a plurality of queues arranged in a hierarchy, each queue in the plurality of queues having a storage interval that successively increases from a highest queue to a lowest queue (D'Souza et al. – Page 2, ¶¶ [0028 – 0029] disclose multiple classes of queues being serviced from highest to lowest rate); and

moving email messages from a higher queue to a next lower queue after being stored in said higher queue for a duration of its storage interval (Shaw et al.—Column 11, lines 40-46 disclose the email message being rerouted based on delivery timeout).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine storing in a first queue, and attempting to send to said at least one destination server at a first sending rate; and attempting to send stored in said second queue to said at least one destination server at a second sending rate that is less than the first sending rate; and moving from said second queue to said first queue; the second queue being one of a plurality of queues arranged in a hierarchy, each queue in the plurality of queues having a storage interval that successively increases from a highest queue to a lowest queue; and moving email messages from a higher queue to a next lower queue after being stored in said higher queue for a duration of its storage interval taught by D'Souza et al., with a delivery server comprising a plurality of queues and a controller for moving email messages stored in said first queue to a second queue based upon a delivery failure taught by Shaw et al.

One of ordinary skill in the art at the time the invention was made would have been motivated to mitigate the effects of transmission flooding by those deemed to have adverse effect on communication throughput (D'Souza et al. - ¶ [0014]).

While the combination of Shaw et al. D'Souza et al. discloses faster and slower sending rate queues, D'Souza et al. refer to these rates as de-queue rates in ¶¶ [0017 and 0018]. Therefore D'Souza does not *explicitly* disclose the sending rates as "sending attempt rates." However, Rouse discloses

sending attempt rates (Rouse discloses multiple queues with higher priority queues having more frequent message transmissions and lower priority queues having less frequent message transmissions - 2:10-14).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine sending attempt rates taught by Rouse, with the first and second sending rates taught by the combination of Shaw et al. and D'Souza et al., in order to prioritize message delivery (Rouse – 2:4-10).

The combination of Shaw et al., Rouse and D'Souza et al. discloses the email delivery server with queues and detection of email message delivery success or failure, but do not explicitly disclose having a common characteristic with a successfully delivered message. However, Sherwood discloses

having a common characteristic with a successfully delivered message (Sherwood discloses the table of email recipients with status of successful delivery confirmation and the delivery confirmation list– Figure 2, elements 250, 245, 200; Figure 3, elements 300, 320 and 330; Column 4, lines 45-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine having a common characteristic with a successfully delivered message taught by Sherwood, with detecting success or failure of email delivery taught by the combination of Shaw et al., D'Souza et al. and Rouse.

One of ordinary skill in the art at the time the invention was made would have been motivated to provide selective application of email delivery options (Sherwood – Column 2, lines 23-29).

As to Claims 2, 11, 18 and 25, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the system of Claims 1, 10, 17 and 24 respectively, wherein the delivery failures are based upon a failure to deliver email messages to respective message boxes (Shaw et al.—Column 11, lines 40-46 disclose the email message being rerouted based on status of delivery timeout); and

wherein the common characteristic comprises a common message box (D'Souza et al. - Page 2, ¶ [0030] discloses the common characteristic of status of whether the source address is known).

The motivation and obviousness arguments are the same as in Claim 1.

As to Claims 4, 13, 20 and 27, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the system of Claims 1, 10, 17 and 24 respectively, wherein said controller stores directly in said second queue email messages generated by said communications devices sharing the common characteristic with an email

message already stored in said second queue (D'Souza et al. – Page 2, ¶ [0028] discloses direct storage into the slower queue based on the common status of unknown source address; Shaw et al. discloses email messages as previously discussed).

The motivation and obviousness arguments the same as in Claim 1.

As to Claims 6, 15, 22 and 29, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the system of Claims 1, 10, 17 and 24 respectively, wherein said controller attempts to send messages from each of said queues in the hierarchy at successively decreasing sending attempt rates from said highest queue to said lowest queue (D'Souza et al. – Page 2, ¶ [0029] discloses multiple classes of queues between fastest to slowest; Rouse discloses multiple queues with higher priority queues having more frequent message transmissions and lower priority queues having less frequent message transmissions - 2:10-14).

The motivation and obviousness arguments are the same as in Claim 1.

As to Claim 8, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the communications system of Claim 1 wherein at least one of said plurality of communications devices comprises a wireless communications device (Shaw et al. – Column 1, lines 22-27 discloses internet which one of ordinary skill in the art at the time the invention was made would know to include wireless devices such as phones (line 17), pda's, laptops etc.).

As to Claim 9, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the communications system of Claim 1 further comprising a wide area network (WAN) connecting said at least one destination server and said delivery server (Shaw et al. – Column 1, lines 22-27 discloses internet which one of ordinary skill in the art at the time the invention was made would know to include wide area networks).

9. Claims 3, 12, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shaw et al., D'Souza et al., Rouse and Sherwood as applied to claims 1, 10, 17 and 24 above respectively, and further in view of US 2003/0145106 A1 (Brown).

As to Claims 3, 12, 19 and 26, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the system of Claims 1, 10, 17 and 24 respectively, wherein the delivery failures are based upon a failure to deliver email messages to said destination servers (Shaw et al.—Column 11, lines 40-46 disclose the email message being rerouted based on status of delivery timeout); and

wherein the common characteristic comprises having respective message boxes hosted by a common destination server (D'Souza et al. – Page 2, ¶ [0028] discloses direct storage into the slower queue based on the common status of unknown source address).

The combination of Shaw et al., D'Souza et al., Rouse and Sherwood does not explicitly disclose wherein said at least one destination server comprises a plurality of destination servers, but Brown discloses wherein said at least one destination server comprises a plurality of destination servers (Brown – Page 2, paragraph [0026] discloses the group of email servers).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein said at least one destination server comprises a plurality of destination servers taught by Brown with at least one destination server for hosting a plurality of electronic mail (email) message boxes taught by the combination of Shaw et al., D'Souza et al., Rouse and Sherwood.

One of ordinary skill in the art at the time the invention was made would have been motivated to provide an intermediary to improve network traffic flow (Brown – Page 1, paragraphs [0005-0007]).

10. Claims 7, 16, 23 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shaw et al., D'Souza et al., Rouse and Sherwood as applied to claims 5, 14, 21 and 28 above respectively, and further in view of US 5,632,011 (Landfield et al.).

As to Claims 7, 16, 23 and 30, the combination of Shaw et al., D'Souza et al., Rouse and Sherwood discloses the system of Claims 1, 10, 17 and 24 respectively.

The combination of Shaw et al., D'Souza et al., Rouse and Sherwood does not disclose wherein said controller discards messages from said lowest queue in the hierarchy after being stored therein for the storage interval thereof, but Landfield et al. discloses wherein said controller discards messages from said lowest queue in the hierarchy after being stored therein for the storage interval thereof (Landfield et al. – Column 2, lines 12-22 disclose the deletion of undeliverable messages from the queue. The fact that it is determined undeliverable is the same as the applicant's determination on non-deliverability based on failure to deliver at the lowest queue).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine wherein said controller discards messages from said lowest queue in the hierarchy after being stored therein for the storage interval thereof taught by Landfield et al., with wherein said controller moves email messages stored in said first queue to one of the queues in the hierarchy based upon a delivery failure taught by the combination of Shaw et al., D'Souza et al., Rouse and Sherwood.

One of ordinary skill in the art at the time the invention was made would have been motivated to improve management of email by allowing undeliverable emails to be discarded (Landfield et al. – Column 1, lines 56-61).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These were included in a prior Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD G. KEEHN whose telephone number is (571)270-5007. The examiner can normally be reached on Monday through Thursday, 9am - 8pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharja can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rupal D. Dharja/
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RGK

